

MONTGOMERY COUNTY, MARYLAND
DEPARTMENT OF TRANSPORTATION
DIVISION OF TRAFFIC ENGINEERING AND OPERATIONS

JULY 2010

**STREETLIGHT INSTALLATION GUIDELINES
UNDERGROUND DISTRIBUTION**

Policy LTG-2

I) Residential Areas

A) Single Family Land Use - roadways 36' or less.

1) Luminaires - (each equipped with a photocell)

- a) Colonial post top (Type III distribution) - energized by utility company.
- b) Contemporary post top (Type III distribution) -energized by utility company.
- c) Decorative “Washington Globe” post top (Type III distribution) - furnished and installed by others -energized by utility company - (specifications separately approved by DTEO in advance)

2) Posts

For luminaire a) or b): 12' to 16' above ground, direct burial, black or grey fiberglass.

For luminaire c) 12' cast iron or cast aluminum with 17" pedestal (footings are required for this style post).

3) Lamps

For luminaire a), b) or c):

PEPCO area - 70 watt HPSV (mid-block) and 100 watt HPSV at intersections and specially designated areas as approved by DTEO.

BG&E and Allegheny Power areas - 100 watt HPSV as approved by DTEO (minimum wattage provided by these areas).

4) Lateral Placement

For luminaire a), b) or c):

Streetlights at intersections shall be placed two feet (2') from the back of the curb or a minimum of six feet (6') from the edge of pavement in open section roadways.

Streetlights throughout a subdivision shall be placed one foot (1') in front (street side) of the sidewalk on open or closed section tertiary, secondary, or primary residential roadways.

Streetlights throughout a subdivision shall be placed ten foot (10') minimum from edge of pavement/curb or as directed by engineer on open or closed section tertiary, secondary, or primary residential roadways.

5) Longitudinal Spacing

For luminaire a), b) or c):

High density (19,999 Sq. Ft. or less lots) -- 175' maximum alternate arrangement desirable, using property lines whenever possible, and using opposite arrangement for divided roadways.

Low density (20,000 Sq. Ft. or greater lots) -- 300' maximum alternate arrangement using property line where possible and using opposite arrangement for divided roadways.

6) General Installation Guidelines

- a) Provide appropriate streetlight at intersection with an existing roadway. Use existing utility poles if available.
- b) Install the first streetlight a maximum of one half of the specified longitudinal spacing from intersection.
- c) Streetlights should be oriented towards the major road at T-type intersections and at four-way stop intersections.
- d) Maintain the following minimum clearance distances; Five feet (5') from driveways, inlets, storm drains, and fire hydrants, water, gas, electric and sewer lines;
Fifteen feet (15') from trees.

- B) Multi-Family Land Use - roadways 36' wide or less (NOTE: for multi-family land use roadways wider than 36', see Part II, Commercial/Industrial Areas).

1) Luminaire - (each equipped with a photocell)

- a) Colonial post top (Type III distribution) - energized by utility company.
- b) Cobra (Type III distribution), cut-off [flat glass] - energized by utility company.
- c) Rectilinear (Type III distribution), decorative bronze - furnished and installed by others - energized by utility company (specifications approved by DTEO). PEPCO region only.
- d) Residential decorative (Washington Globe) (Type III distribution), decorative green - furnished and installed by others - energized by utility company (specifications approved by DTEO).

2) Post

For luminaire a):	12' to 16' above ground, black or grey fiberglass, direct burial.
For luminaire b):	26' pendant aluminum post, concrete footing or screw base required.
For luminaire c):	25' round, galvanized steel or aluminum, bronze coated pole (specifications shall be approved by DTEO), concrete footing or screw base required.
For luminaire d):	12' cast iron or cast aluminum with 17" pedestal (concrete footings are required for this style post).

3) Lamp

For luminaire a) or d):	100 to 150 watt, HPSV.
For luminaire b):	100 to 250 watt, HPSV.
For luminaire c):	150 to 250 watt, HPSV.

4) Lateral Placement

For luminaire a), b), c) or d):

Streetlights at intersections shall be placed two feet (2') from the back of the curb or a minimum of six feet (6') from the edge of pavement in open or closed section roadways.

Streetlights throughout a subdivision shall be placed one foot (1') in front of the sidewalk on open or closed section tertiary, secondary, or primary residential roadways.

Streetlights shall be placed one foot (1') behind the sidewalk and/or one foot (1') in front of the property line on open or closed section master plan arterial, or higher roadways.

5) Longitudinal Spacing

150' maximum alternate arrangement desirable.

6) General Installation Guidelines

- a) Provide appropriate streetlight at intersection with an existing roadway. Use existing utility poles if available.
- b) Install the first streetlight a maximum of one half the specified longitudinal spacing from intersection.
- c) Streetlights should be oriented towards the major road at T-type intersections and at four-way stop intersections.
- d) Maintain the following clearance minimum distances:

Five foot (5') from driveways, inlets, storm drains, and fire hydrants, water, gas, electric and sewer lines:

Fifteen foot (15') from trees.

C) Public Maintained Land (pathways)

1) Luminaires - (each equipped with a photocell)

- a) Colonial post top (Type III distribution) - energized by utility company.
- b) Contemporary post top (Type III distribution) -energized by utility company.
- c) Decorative “Washington Globe” post top (Type III distribution) - furnished and installed by others -energized by utility company - (specifications separately approved by DTEO in advance)

2) Posts

For luminaire a) or b): 12' to 16' above ground, direct burial, black or grey fiberglass.

For luminaire c) 12' cast iron or cast aluminum with 17" pedestal (footings are required for this style post).

3) Lamps

For luminaire a), b) or c):

PEPCO area - 70 watt HPSV (mid-block) and 100 watt HPSV at intersections and specially designated areas as approved by DTEO.

BG&E and Allegheny Power areas - 100 watt HPSV as approved by DTEO (minimum wattage provided by these areas).

4) Lateral Placement

For luminaire a), b) or c):

Streetlights shall be placed two feet (2') from the edge of pavement.

5) Longitudinal Spacing

For luminaire a), b) or c):

75' maximum alternate arrangement desirable, using property lines whenever possible

6) General Installation Guidelines

- a) Provide appropriate streetlight at intersection with an existing roadway. Use existing utility poles if available.
- b) Install the first streetlight a maximum of one half of the specified longitudinal spacing from intersection.
- c) Streetlights should be oriented towards the road at T-type intersections and at four-way stop intersections.
- d) Maintain the following minimum clearance distances; Five feet (5') from driveways, inlets, storm drains, and fire hydrants, water, gas, electric and sewer lines; Fifteen feet (15') from trees.

II. Commercial and Industrial Areas

(NOTE : This includes multi-family land use on roadways wider than 36').

1) Luminaires - (each equipped with a photocell)

- a. Cobra (Type III distribution), cut-off [flat glass] - energized by utility company.
- b. Rectilinear (Type III distribution), decorative bronze - furnished and installed by others - energized by PEPCO (specifications separately approved by DTEO are available upon request). PEPCO region only.
- c. Rectilinear (rectangular) (Type III distribution), decorative bronze - furnished, installed and energized by utility company. ALLEGHENY POWER AND BALTIMORE GAS & ELECTRIC regions.

2) Posts

For luminaire a):	26' spun aluminum pendant style, concrete footing or screw base preferred (direct burial may be allowed in special circumstances.) *
For luminaire b):	25' to 40' galvanized steel or aluminum, bronze coated pole (specifications shall be approved by DTEO.)

For luminaire c): 25' or 30', square steel pole, bronze colored pole, screw base mounted.

3) Lamps

For luminaire a): 100-250 watt HPSV with photoelectric control on each pole.

For luminaire b): 100-250 watt HPSV HPSV with photoelectric control on each pole. (Specification as separately approved by DTEO upon request).

For luminaire c): 100 - 200 watt HPSV HPSV with photoelectric control on each pole.

4) Lateral Placement

For luminaire a), b) or c): one foot (1') behind the back of the sidewalk or one foot in front of the County right-of-way line.

5) Longitudinal Spacing

For luminaire a), b) or c): 125' to 150' opposite arrangement desirable.

6) General Installation Guidelines

- a. Provide appropriate streetlight at intersection with an existing roadway. Use existing utility poles if available.
- b. Install the first streetlight a maximum of one half of the specified longitudinal spacing.
- c. Streetlight should be oriented towards the major road at T-type intersections and at four-way stop intersections.
- d. Maintain the following clearance distances:

Five foot (5') from driveways, inlets, storm drains, and fire hydrants, water, gas, electric and sewer lines:
Fifteen foot (15') from trees.

III) Arterial and Major Roadways (CIP Projects)

- 1) Luminaires - (each equipped with a photocell)
 - a. Cobra (Type III distribution) cut-off - furnished, installed and energized by utility company.
 - b. Rectilinear (Type III distribution) decorative bronze --furnished by others and installed by either utility company or others - energized by utility company. (Specifications as separately approved by DTEO)
 - c. Rectilinear (rectangular), (Type III distribution) decorative bronze --furnished, installed and energized by utility company.
ALLEGHENYPOWER OR BALTIMORE GAS & ELECTRIC regions.

2) Posts

For luminaire a):	26' pendant style, concrete footing or crew base mounted preferred.
For luminaire b):	25' to 40' galvanized steel or aluminum, bronze coated poles, concrete footing required (specifications shall be approved by DTEO.)
For luminaire c):	25 or 30', square pole, concrete footing or screw base mounted.

3) Lamps

For luminaire a):	100 - 250 watt, HPSV HPSV with photoelectric control on each pole.
For luminaire b):	100 - 250 watt HPSV HPSV with photoelectric control on each pole. (Specification as approved by DTEO.)
For luminaire c):	100 or 200 watt HPSV HPSV with photoelectric control on each pole.

4) Lateral Placement

For luminaire a), b) or c):	one foot (1') behind the back of the sidewalk or one foot in front of the County right-of-way line or as directed by the engineer.
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5) Longitudinal Spacing

For luminaire a), b), or c):

- a) 125' to 150' desirable.
- b) alternate spacing for roadways up to 36' wide.
- c) opposite arrangement for roadways over 36' wide and for divided roadways.

6) General Installation Guidelines

- a. Provide appropriate streetlight at intersection with an existing roadway, Use existing utility poles if available.
- b. Install the first streetlight a maximum of one half of the specified longitudinal spacing from the intersection.
- c. Streetlight should be oriented towards the major road at T-type intersections and at four-way stop intersections.
- d. Maintain the following minimum clearance distances:

Five foot (5') from driveways, inlets, storm drains, and fire hydrants, water, gas, electric and sewer lines:
Fifteen foot (15') from trees.

IV. Metro-Impact Areas/Urban Revitalization Districts

1) Lateral Placement

Shall be installed as specified in the master plan and/or sector plan, most recent publication, as approved by M-NCPPC/ DTEO.

2) Longitudinal Placement

Shall be as specified in the master plan and/or sector plan, most recent publication, as approved by M-NCPPC/ DTEO.

The following architecturally designed streetlight fixtures (luminaires and posts) have been approved for use:

Vehicular Streetlights

Bethesda Lantern
Damascus Highlight
Rectilinear, Decorative Bronze
Silver Spring Highlight
Silver Spring Vehicular Tear-drop
Wheaton Highlight
Avenel Decorative Lights

Pedestrian Lights

Damascus Light
Silver Spring Washington Globe
Silver Spring Cluster
Silver Spring Pedestrian Tear-drop
Washington Globe
Wheaton Light

All the above fixtures are furnished, installed by others - energized by the utility company. Specifications as separately approved by DTEO are available on requests.

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